

ON *RANELLA LEUCOSTOMA*, LAMARCK.

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THE object of the present note is to find a permanent generic resting-place<sup>1</sup> for this well-known shell, which in the past has been shifted from one genus to another, and also to raise to specific rank a form from South Africa hitherto regarded as a variety of it.

In the year 1811 it was placed in the genus *Biplex* by Perry; in 1822 Lamarck, and Deshayes in 1830, called it a *Ranella*; in 1833 it was deemed a *Triton* by Quoy & Gaimard; in 1842, 1843, 1844, 1870, 1886, 1892, and 1903 it reverted to *Ranella* on the authority of Kiener, Deshayes, Reeve, Kobelt, Sowerby, and Martens; in 1857 Gray transferred it to *Apollon*; in 1853 and 1867 it reposed in *Bursa* (sub-genus *Apollon*) teste H. & A. Adams and Angus; in 1881 and 1885 Tryon and Watson regarded it as a *Ranella* of the sub-genus *Argobuccinum*; in 1888, on the authority of Pritchard & Gatliff, *Lotorium* (sub-genus *Argobuccinum*) claimed it; in 1901 and 1902 Hedley and Kesteven gave it a temporary resting-place in *Gyrineum*; in 1904 Hutton placed it in *Apollo*; in 1906 Smith referred it to *Septa*, and in 1912 and 1913 Verco and Suter located it in *Argobuccinum*.

In deciding the proper position of this species it all depends upon what characters should be regarded of generic importance. If it were merely a question of selecting the oldest name applied to the groups '*Triton*' and '*Ranella*', as understood by Lamarck, the matter would be comparatively simple, but in the present day the tendency is to multiply generic divisions, and consequently there is much more difficulty, in the present case at all events, of selecting the right genus.

Since *Ranella leucostoma* in shell characters has a greater general resemblance to the big '*Triton* shells' (e.g. *rubicunda*, Perry = *australis*, Lamarck) than to any other group, and the opercula are similar, I am inclined to place it along with them in the genus *Charonia* of Gistel. Dall<sup>2</sup> at one time considered this name synonymous with *Septa* of Perry, but it has since been pointed out by Matthews & Iredale<sup>3</sup> that this was a false conclusion. Iredale<sup>4</sup> subsequently clearly proved that the type of *Septa* of Perry is not the species selected by Dall, who at the time had not consulted Perry's earlier work, the *Arcana*, in which the first introduction of *Septa* appeared.

The external features of the animal of *Ranella leucostoma* have been described by Quoy & Gaimard,<sup>5</sup> and they are similar in general

<sup>1</sup> This is almost a hopeless task until the animals of the various groups of Tritons have been investigated.

<sup>2</sup> Smithsonian Misc. Coll., vol. xlviii, p. 134, 1904.

<sup>3</sup> *Victorian Naturalist*, vol. xxix, p. 9, 1912.

<sup>4</sup> *Nautilus*, vol. xxvii, p. 55, 1913.

<sup>5</sup> *Voy. Astrolabe*, Zool., vol. ii, p. 547.

character to those of typical forms of *Charonia*. Beyond a few words descriptive of the radula by the same authors nothing is known of it, and consequently one cannot compare it with the radulæ of '*Tritonium nodiferum*' and '*T. variegatum*' as described and figured by Troschel.<sup>1</sup> It is therefore simply on conchological characters that I now place this species in the genus *Charonia*. In a specific point of view this species has been more fortunate, having only twice received a trivial name.

Perry in 1811 was the first to describe it under the name *Biplex australasia*, and then Lamarek in 1822 designated it *Ranella leucostoma*, under which name it was commonly referred to until attention was directed to Perry's work by Mr. Hedley<sup>2</sup> in 1901, and since that date, with one or two exceptions, the name *australasia* has been accepted. In following this general practice I suggest emending the word by adding a terminal *na*, and thus making it a proper qualifying term, *australasiana*.

CHARONIA AUSTRALASIANA (Perry).

1811. *Biplex australasia*, Perry, Conchology, pl. iv, fig. 2.  
 1822. *Ranella leucostoma*, Lamarek, Anim. sans Vert., vol. vii, p. 150.  
 1830. *R. leucostoma*, Deshayes, Encycl. Méthod., Vers, vol. iii, p. 878.  
 1833. *Triton leucostomum*, Quoy & Gaimard, Voy. *Astrolabe*, Zool., vol. ii, p. 546, pl. xl, figs. 3-5.  
 1842. *Ranella leucostoma*, Kiener, Coq. Viv., p. 29, pl. ix, fig. 1.  
 1843. *R. leucostoma*, Deshayes, Anim. sans Vert., 2nd ed., vol. ix, p. 542.  
 1844. *R. leucostoma*, Reeve, Conch. Icon., vol. ii, pl. i, fig. 4.  
 1853. *Bursa (Apollon) leucostoma*, H. & A. Adams, Gen. Rec. Moll., vol. i, p. 106.  
 1857. *Apollon leucostomum*, Gray, Guide Syst. Distrib. Moll. Brit. Mus., pt. i, p. 42.  
 1867. *Bursa (Apollon) leucostoma*, Angas, Proc. Zool. Soc., p. 189.  
 1870. *R. leucostoma*, Kobelt, Conchyl. Cab., p. 127, pl. xxxviii, fig. 4.  
 1881. *R. (Argobuccinum) leucostoma*, Tryon, Man. Conch., vol. iii, p. 42, pl. xxiii, figs. 53, 54.  
 1885. *R. (Argobuccinum) leucostoma*, Watson, Challenger Gasterop., p. 401.  
 1898. *Lotorium (Argobuccinum) leucostoma*, Pritchard & Gatliff, Proc. Roy. Soc. Victoria, vol. x, p. 268.  
 1902. *Gyrineum australasia*, Hedley, Proc. Linn. Soc. N.S.W., 1901, vol. xxvi, p. 631.  
 1902. *G. australasia*, Kesteven, Proc. Linn. Soc. N.S.W., 1901, vol. xxvi, p. 713, pl. xxxvi, fig. 1, protoconch.  
 1904. *Apollo australasia*, Hutton, Index Faunæ Nov. Zeal., p. 75.  
 1912. *Argobuccinum australasia*, Verco, Trans. Roy. Soc. S. Austr., vol. xxxvi, p. 220.

<sup>1</sup> Gebiss der Schnecken, vol. i, pp. 232, 233, pl. xix, figs. 11, 12.

<sup>2</sup> Proc. Linn. Soc. N.S.W., 1901, vol. xxvi, p. 631, 1902.

1913. *A. australasia*, Suter, Man. New Zeal. Moll., p. 310, pl. xliii, fig. 5.

*Hab.*—East and South Australia, New Zealand (North Island), Kermadec Islands, Norfolk Island.

*CHARONIA POECILOSTOMA*, n.sp.

1886. *Ranella leucostoma*, var. (?), Sowerby, Journ. Couch., vol. v, p. 8.

1892. *R. leucostoma*, Lamarck, var., Sowerby, Marine Shells South Africa, p. 9.

1903. *R. leucostoma*, Lam., var. *poecilostoma*, Martens, Deutsch. Tiefsee-Exped. *Valdivia*, vol. vii, p. 56.

1906. *Septa leucostoma*, Smith, Ann. Natal Mus., vol. i, p. 41.

*Hab.*—Cape Colony and Natal.

As pointed out by Sowerby and Martens, this species differs from *Charonia leucostoma* in always having "dark-brown blotches" on the labrum, which in *leucostoma* is invariably pure white. In adult specimens this dark-brown colour also occurs on the outer edge of the callus, which is spread over the columella, and about the middle and above the tubercle on the upper part it forms large suffused blotches.

There does not appear to be any other marked feature to distinguish the two forms, but judging from six examples from South Africa and eighteen from Australia and New Zealand, the varices on the former, especially on the spire, are less raised and not so deeply pitted behind. Also the general form of the shell is a trifle broader.